In the Claims: Please amend the claims to read as follows:

1. (Currently Amended) Method for transmitting information symbols using a plurality of carriers, the method comprising the following steps:

generating a first transmission symbol from an information symbol;

generating a second transmission symbol from the same information symbol, the second transmission symbol being different ~~to~~ from the first transmission symbol,

wherein the steps of generating the first transmission symbol and the second transmission symbol are performed using a signal constellation diagram having a predefined number of different states in a complex constellation plane, the first transmission symbol having a first state in the complex constellation plane, and the second transmission symbol having a second state in the complex constellation plane,

wherein the steps of generating the first transmission symbol and the second transmission symbol are performed such that the first state is one state of a plurality of predefined phase states and the second state has a different phase state than the first state, or the second state has the same phase state as the first phase state but has a different amplitude than the first state ~~from each information symbol at least two transmission symbols differing from each other can be generated, these being clearly allocated to this information symbol, and wherein all transmission symbols, which can be generated from the individual transmission symbols differ from each other and from the information symbols~~ ;

modulating the first transmission symbol on a carrier, and transmitting the carrier modulated with the first transmission symbol at a first time; and

modulating the second transmission symbol on a carrier, and transmitting the carrier modulated with the second transmission symbol at a second time, the second time being after the first time.

2. (Currently Amended) Method for transmitting information symbols using a plurality of carriers, comprising the following steps:

generating a first transmission symbol ~~from a~~ from an information symbol;

generating a second transmission symbol from the same information symbol, the second transmission symbol being different ~~to~~ from the first transmission symbol, wherein the steps of generating the first transmission symbol and the second transmission symbol are performed using a signal constellation diagram having a predefined number of different states in a complex constellation plane, the first transmission symbol having a first state in the complex constellation plane, and the second transmission symbol having a second state in the complex constellation plane,

wherein the steps of generating the first transmission symbol and the second transmission symbol are performed such that the first state is one state of a plurality of predefined phase states and the second state has a different phase state than the first state, or the second state has the same phase state as the first phase state but has a different amplitude than the first state; ~~wherein from each information symbol at least two transmission symbols differing from each other can be generated, these being clearly allocated to this information symbol, and wherein all transmission symbols, which can be generated from the individual transmission symbols differ from each other and from the information symbols;~~

generating a difference between the first transmission symbol and a transmission symbol preceding the first transmission symbol in time, in order to obtain a first differential symbol;

generating a difference between the second transmission symbol and a transmission symbol preceding the second transmission symbol in time, in order to obtain a second differential symbol;

modulating the first differential symbol on a carrier, and ~~transmittiog~~ transmitting the carrier modulated with the first differential symbol at the first time; and

modulating the second differential symbol on a carrier, and transmitting the carrier modulated with the second differential symbol at a second time, the second time being after the first time.

3. (Currently Amended) Method in accordance with claim ~~1 or~~ 2, in which the carrier modulated with the first transmission symbol or differential symbol differs from the carrier modulated with the second transmission symbol or differential symbol.

4. (Currently Amended) Method in accordance with claim~~1 or~~2 in which the period of time between the first time and the second time is so long that transmission with the carriers modulated with the two transmission symbols or differential symbols via a transmission channel are statistically independent of one another.

5. (Cancelled)

6. (Cancelled)

7. (Currently Amended) Method in accordance with claim 2, in which, in addition to the first and second transmission symbols, two further transmission symbols are transmitted at different times, the two transmission symbols having the same phase state from a number of four phase states in the complex plane, but having different amplitudes to each other taken from a number of four specified amplitudes.

8. (Original) Method in accordance with claim 7, in which phase allocation to a binary symbol is carried out before the step of modulating, and in which the step of modulating includes a step of inverse frequency transforming the plurality of phase shift-keyed carriers into the complex time domain.

9. (Currently Amended) Method in accordance with claim ~~1 or~~ 2, in which N different carriers, N information symbols, N first transmission symbols and N second transmission symbols are present, in which a multi-carrier modulator symbol includes the result of an inverse Fourier transform of the N carriers incorporating the transmission symbols or differential symbols, and in which an MCM frame exhibits a plurality of MCM symbols.

10. (Currently Amended) Method in accordance with claim ~~1~~ 9, in which N second transmission symbols corresponding to N information symbols, are distributed in time over several MCM frames.

11. (Currently Amended) Method for receiving information symbols transmitted by means of a plurality of carriers, wherein an information symbol is represented by a first transmission symbol and a second different transmission symbol, which are received at different times, wherein the first transmission symbol and the second transmission symbol are generated using a signal constellation diagram having a predefined number of different states in a complex constellation plane, the first transmission symbol having a first state in the complex constellation plane, and the second transmission symbol having a second state in the complex constellation plane, and wherein the first state is one state of a plurality of predefined phase states and the second state has a different phase state than the first state, or the second state has the same phase state as the first phase state but has a different amplitude than the first state ~~wherein from each information symbol at least two transmission symbols differing from each other can be generated, these being clearly allocated to this information symbol, and wherein all transmission symbols, which can be generated from the individual transmission symbols differ from each other and from the information symbols~~ , comprising the following steps:

demodulating a first carrier, in order to obtain the first received transmission symbol at a time;

storing the first received transmission symbol, or of information which refers to the first received transmission symbol;

demodulating a further carrier at a second time, in order to obtain a second received transmission symbol, and

using the stored first received transmission symbol or the information which refers to the first received transmission symbol and the second received transmission symbol, in order to determine the information symbol [[,]] on which the two received transmission symbols are based, by ascertaining to which information symbol from the information symbols the first received transmission symbol ~~und~~ and the second received transmission symbol being different from the first received transmission symbol are allocated, by using the signal constellation diagram.

12. (Original) Method in accordance with claim 11, in which both carriers are different to one another.

13. (Currently Amended) Method in accordance with claim 11, in which the transmission symbols are differentially coded, one information symbol being represented by the difference between two transmission symbols adjacent to each other in time, which furthermore includes the following steps:

estimating phases of the first received transmission symbol and of one of the received transmission symbols preceding in time the first received transmission symbol;

calculating the difference between the estimated phases, in order to obtain a first received phase difference referring to the information symbol;

conducting the steps of estimating and calculating the difference for the second received transmission symbol, in order to obtain a second received phase difference referring to the same information symbol;

carrying out a soft decision, based both on the first and second received phase differences, in order to obtain a first value and a second value ~~second values~~ for the information symbol; and

determining the information symbol using the first value and/or the second value.

14. (Original) Method in accordance with claim 13, in which, instead of the step of carrying out a soft decision, the following step is carried out:

carrying out a hard decision, based both on the first and second received phase difference, in order to obtain a first value and a second value for the information symbol.

15. (Original) Method in accordance with claim 13, in which, in the step of determining, greater consideration is given to the value for which the amplitudes of the transmission symbols, on which its reception is based and from which the phase difference has been determined, are closer to a predetermined threshold.

16. (Original) Method in accordance with claim 11, in which the transmission symbols are differentially coded, wherein one information symbol is represented by the difference between two transmission symbols adjacent in time, which furthermore includes the following steps:

multiplying a first received symbol by the conjugated complex value of a preceding received symbol;

multiplying a second received symbol by the conjugated complex value of a preceding received symbol;

calculating Log-Likelihood Ratios for each of the multiplication results; and

determining the information symbol from first and second Log-Likelihood Ratios.

17. (Original) Method in accordance with claim 16, in which, in the step of determining, the Log-Likelihood Ratios for which the multiplication result on which they are based has a higher magnitude are given more consideration.

18. (Original) Method in accordance with claim 16, in which, in the step of determining, the Log-Likelihood Ratios of both multiplication results are added, in order to obtain a Log-Likelihood Ratio for each bit of the information symbol.

19. (Original) Method in accordance with claim 16, in which the Log-Likelihood Ratios for the bits of the information symbol are passed to a Viterbi decoding algorithm, in order to determine the bits of the information symbol in the receiver.

20. (Currently Amended) Apparatus for transmission of information symbols by means of a plurality of carriers, comprising:

~~means~~ a generator for generating a first and a second transmission symbol, based on ~~s~~ a single information symbol, wherein the first and second transmission symbols differ from one another, wherein the generator is adapted to use a signal constellation diagram having a predefined number of different states in a complex constellation plane, the first transmission symbol having a first state in the complex constellation plane, and the second transmission symbol having a second state in the complex constellation plane,

wherein the generator is adapted to operate such that the first state is one state of a plurality of predefined phase states and the second state has a different phase state than the first state, or the second state has the same phase state as the first phase state but has a different amplitude than the first state; ~~wherein from each information symbol at least two transmission symbols differing from each other can be generated, these being clearly allocated to this information symbol, and wherein all transmission symbols, which can be generated from the individual transmission symbols differ from each other and from the information symbols;~~

~~means~~ a modulator for modulating the first and second transmission symbols on a first and second carrier; and

~~means~~ a transmitter for transmitting the modulated first transmission symbol at a first time, and the modulated second transmission symbol at a second time, wherein the second time is after the first time.

21. (Original) Apparatus in accordance with claim 20 in which the first carrier and the second carrier differ from one another.

22. (Currently Amended) Apparatus in accordance with claim 20, in which the ~~device for generating the first and second transmission symbols~~ generator further comprises:

a grouper ~~grouping means~~ for grouping a plurality of bits, in order to form an information symbol; and

a modifier ~~modifying means~~ for changing the first and/or second transmission symbol independently of information represented by the information symbol.

23. (Currently Amended) Apparatus in accordance with claim 20,

in which the ~~means for generating generates~~ generator is adapted to generate more than two transmission symbols differing from each other,

in which the ~~means for modulating modulates~~ modulator is adapted for modulating more than two transmission symbols of the respective carriers, and

in which the ~~means for transmitting transmits~~ transmitter is adapted for transmitting the more than two transmission symbols, each at different times.

24. (Currently Amended) Apparatus in accordance with claim 20, which furthermore comprises:

a differential ~~coding means~~ coder for generating differential symbols between the transmission symbols and respective transmission symbols which precede the transmission symbols in time.

25. (Currently Amended) Apparatus in accordance with claim 20, which furthermore comprises:

~~means~~ an allocator for allocating the symbols to be modulated to one phase value from a predefined number of phase values.

26. (Currently Amended) Apparatus in accordance with claim 20,

in which the ~~modulating means include an inverse,~~ modulator includes an Inverse Fast Fourier Transform for parallel modulation of a plurality of transmission symbols or differential symbols onto a plurality of carriers, in order to generate an MCM symbol.

27. (Currently Amended) Apparatus in accordance with claim 20, which furthermore comprises:

a channel coder ~~coding means~~ for performing a convolution coding of information words, in order to generate bits for the information symbols.

28. (Currently Amended) Apparatus in accordance with claim 26, which furthermore comprises:

a protection interval inserter ~~means~~ for inserting a protection interval between the two MCM symbols, and

~~means~~ a synchronisation interval inserter for inserting a synchronisation sequence, in order to form an MCM frame.

29. (Currently Amended) Apparatus in accordance with claim 28, which furthermore comprises:

an MCM modulator ~~means~~ for modulating an MCM frame on an RF carrier, and

an aerial for transmitting the modulated RF carrier.

30. (Currently Amended) Apparatus for the reception of information symbols, which are transmitted by means of a plurality of carriers, wherein an information symbol is represented by a first and a second transmission symbol, each being different from the other, which are received at different times, wherein the first transmission symbol and the second transmission symbol are generated using a signal constellation diagram having a predefined number of different states in a complex constellation plane, the first transmission symbol having a first state in the complex constellation plane, and the second transmission symbol having a second state in the complex constellation plane, and wherein the first state is one state of a plurality of predefined phase states and the second state has a different phase state than the first state, or the second state has the same phase state as the first phase state but has a different amplitude than the first state, comprising:

a demodulator ~~means~~ for demodulating the modulated carriers at respective times, in order to obtain a first and second received transmission symbol, and

a processor ~~means~~ for using the two received transmission symbols, in order to determine the information symbol on which the two received transmission symbols are based, by ascertaining to which information symbol from the information symbols the first received transmission symbol ~~und~~ and the second received transmission symbol being different from the first received transmission symbol are allocated, by using the signal constellation diagram.

31. (Currently Amended) Apparatus in accordance with claim 30, in which the ~~means for using~~ processor further comprises:

a differential decoder ~~decoding means~~ for forming a phase difference between two successive demodulated received transmission symbols following ~~eath~~ each other in time.

32. (Currently Amended) Apparatus in accordance with claim 31, in which the differential decoder ~~decoding means~~ includes ~~multiplication means, delaying means, and means~~ a multiplier, a delayer, and a former for forming a conjugated complex value.

33. (Currently Amended) Apparatus in accordance with claim 31, in which the ~~means for using~~ processor furthermore comprises:

a calculator ~~means~~ for calculating the Log-Likelihood Ratios for multiplication results, and

a combiner ~~means~~ for combining the Log-Likelihood Ratios for the multiplication results, which relate to the two received transmission symbols, in order to obtain the information symbol.

34. (Currently Amended) Apparatus in accordance with claim 33, in which the ~~means for combining~~ combiner is arranged so as to add the Log-Likelihood Ratios based on the first and second received transmission symbols, wherein the apparatus furthermore comprises:

~~channel decoding means~~ a channel decoder, which includes a Viterbi decoder.

35. (Currently Amended) Apparatus in accordance with claim 30, in which an information symbol is transmitted via a difference between the first symbol and the transmission symbol preceding it in time, and via a difference between the second transmission symbol and the transmission symbol preceding this in time, the apparatus furthermore comprising:

an estimator ~~means~~ for estimating the phase of each received transmission symbol, and

a difference former ~~means~~ for forming the difference between the phase of the received transmission symbol and the phase of the received transmission symbol before this, in order to obtain a received phase difference value for each transmission symbol.

36. (Currently Amended) Apparatus in accordance with claim 35, in which the ~~device for using~~ processor furthermore comprises:

a soft decider ~~means~~ for obtaining the information symbol via a soft decision, based on the received phase difference value, by means of a Viterbi algorithm.

37. (Currently Amended) Apparatus in accordance with claim 35, in which the ~~device for using~~ processor furthermore comprises:

a threshold decider ~~deciding means~~ for obtaining the information symbol for comparing the received phase difference values for the first and second received transmission symbols, with a hard threshold, and

~~means~~ a result combiner for combining the results of the threshold deciding means for the first and second received transmission symbols, in order to obtain the information symbol.

38. (New) Apparatus for the reception of information symbols, which are transmitted by means of a plurality of carriers, wherein an information symbol is represented by a first and a second transmission symbol, each being different from the other, which are received at different times, comprising:

a demodulator for demodulating the modulated carriers at respective times, in order to obtain a first and second received transmission symbol, and

a processor for using the two received transmission symbols, in order to determine the information symbol on which the two received transmission symbols are based, by ascertaining to which information symbol from the information symbols the first received transmission symbol und the second received transmission symbol being different from the first received transmission symbol are allocated,

wherein the processor comprises a differential decoder for forming a phase difference between two successive demodulated received transmission symbols following each other in time.